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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,303

01/04/2006

Atsushi Tanno

OGW-0413

8394

24978 7590 06/16/2008

GREER, BURNS & CRAIN  
300 S WACKER DR  
25TH FLOOR  
CHICAGO, IL 60606

EXAMINER

FISCHER, JUSTIN R

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,303	<b>Applicant(s)</b> TANNO ET AL.	
	<b>Examiner</b> Justin R. Fischer	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 7-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-6, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block (US 1,733,681) and further in view of Serban (RO 115859) and Clydesdale. Block substantially teaches the pneumatic tire of the claimed invention, including a member or strap 10 and a fixing band 11. In describing the fixing band, Block suggests the use of a rubberized fabric, leather, or other flexible material (Page 2, Lines 20-30 and 50-55). While the reference fails to expressly disclose the use of a flexible/elastic metallic band, such metallic bands are commonly used in the tire industry and are recognized as equivalent alternatives to elastic bands formed of rubber/resin, as shown for example by Serban (Abstract). In this instance, Serban is directed to a similar flexible layer beneath the crown region of the tire and specifically suggests the alternate use of a highly flexible rubber and a steel strip having an elastic coating thereon. In view of this disclosure and the teaching by Block to use "other flexible materials", one of ordinary skill in the art at the time of the invention would have found it obvious to use a flexible/elastic metal to form the band of Block. Clydesdale is additionally cited to expressly recognize the known use of metallic materials for similar band constructions (band 14 is formed of metal). Lastly, the particular dimensions of

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the band (width and thickness) are highly dependent on the specific tire being manufactured, and thus the tire size (tire components are generally scaled up with increasing tire size), it being noted that the general depictions of Block appear to be on the order of the broad ranges of the claimed invention. Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to form the tire of Block in accordance to the claimed invention.

Lastly, with respect to claim 1, strap 10 can be formed of a rubberized fabric, leather, or other flexible material- each of these materials can be viewed in the general sense as being “porous” and forming a “sound absorbing material”. **It is suggested that applicant amend the claims to require specific materials and/or properties to define over the tire construction of Block.**

Regarding claim 3, as noted above, Serban suggest the alternate use of a steel strip having an elastic coating thereon.

With respect to claim 4, fixing band 11 is provided to protect the inner tube from the member 3 (Page 2, Lines 40-55). It appears that the disclosed tire constructions include an inner tube that is continuous over the circumferential extent of the tire. However, it is also well known to form the inner tube in a discontinuous manner (e.g. a plurality of circumferentially arranged inner tubes)- such a construction is commonly used in order to limit the effects of a puncture (restricted to single chamber/inner tube). In such an instance, each inner tube would be provided with a fixing band, wherein both the inner tube and fixing band would have a circumferential length less than that of the circumferential length of the tire. One of ordinary skill in the art at the time of the

invention would have readily appreciated the broad range of the claimed invention absent any conclusive showing of unexpected results.

As to claim 6, the fixing band 11 of Block has a fixed length.

Regarding claim 10, strap 10 can be alternatively viewed as the elastic fixing band and band 11 can be viewed as the object or sound absorbing member. It is emphasized that the language "sound absorbing member" does not require any specific material since materials in general can be viewed as having some degree of sound absorbing characteristics. Additionally, the term "joined" can be viewed in its broadest sense as "making contact".

With respect to claim 11, the inner circumferential surface the object or sound absorbing member 10 contacts or "is joined" to the outer circumferential surface of the elastic fixing band 11.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Block, Serban, and Clydesdale as applied in claim 1 above and further in view of Gifflo (US 4,265,660) and Guerin (US 5,154,534). As detailed above, one of ordinary skill in the art at the time of the invention would have found it obvious to form the flexible fixing band of Block with a metallic material. In regards to the mechanical properties of the metallic material, the claimed are consistent with those associated with metallic materials, and more particularly metallic materials having a high degree of elasticity/flexibility, as shown for example by Gifflo (Column 2, Lines 61+) and Guerin (Column 1, Lines 25-35). Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to use a

metallic material having a tensile strength between 400 and 1,400 MPa for the elastic/flexible band of Block in view of Serban and Clydesdale.

***Allowable Subject Matter***

4. Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. Applicant's arguments filed March 19, 2008 have been fully considered but they are not persuasive. It is initially noted, though, that the rejections with respect to Clydesdale have been withdrawn in light of applicant's amendments

In regards to the rejections with Block, the reference teaches an assembly comprising an object or strap 10 that can be formed of rubberized fabric, leather, or other flexible materials. Applicant argues that the strap 10 of Block is used to lace the sheet metal members 3 and 7 to each other and such metal members are not sound absorbing members. While this might be the case, strap 10 is being viewed as the sound absorbing member and such a layer can be viewed as a sound absorbing member in view of the disclosed materials above.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Fischer  
/Justin R Fischer/  
Primary Examiner, Art Unit 1791